PATENT

## IN THE CLAIMS:

Please amend claims 1, 7, 14-20 and 24 as indicated in the following.

Please cancel claims 10 and 30 without prejudice as indicated in the following.

## Claims Listing:

- 1. (Currently Amended) A method comprising:
- establishing an encrypted link between a peripheral device and a software component of an information handling system, wherein establishing the encrypted link includes generating a first seed key common to both the peripheral device and the software component;
- providing the first seed key and a public encryption key associated with the peripheral device to a hardware video controller; and
- generating at the hardware video controller, using the first seed key and the public encryption key, a second seed key different from the first seed key, the second seed key to encrypt communications between the software component and the hardware video controller.
- 2. (Original) The method as in Claim 1, wherein generating the first seed key is performed by the software component.
  - 3. (Original) The method as in Claim 2, wherein generating the first seed key includes: using the public encryption key associated with the peripheral device to select a plurality of private encryption keys associated with the software component; and determining the seed key based upon the selected private keys associated with the software component.
- 4. (Original) The method as in Claim 1, wherein generating the first seed key is performed by the peripheral device.

- 5. (Original) The method as in Claim 4, wherein generating the first seed key includes: using the public encryption key associated with the software component to select from a plurality of private encryption keys associated with the peripheral device; and summing the select private keys associated with the peripheral device.
- 6. (Canceled)
- 7. (Currently Amended) The method as in Claim 1, further including: providing the public encryption key associated with the peripheral device and a private decryption key, associated with the software component, to the hardware eomponentvideo controller; and

providing public key encryption between the <u>hardwarevideo</u> controller and the peripheral device,

- 8. (Canceled)
- 9. (Canceled)
- 10. (Canceled)
- 11. (Original) The method as in Claim 1, wherein the peripheral device is a display device.
- 12. (Original) The method as in Claim 1, wherein the step of establishing further includes the first seed key being based upon the peripheral device and the information handling system.
- 13. (Original) The method as in Claim 12, wherein the first seed key is unique to the peripheral device and the information handling system.

- 14. (Currently Amended) A hardware video controller comprising:
- a bus connection to receive a first seed key from a software component within an information handling system;
- a digital communications connector to connect to a peripheral device and to receive a public encryption key from said peripheral device;
- a first set of registers to store said first seed key, said first seed key common to both said information handling system and said peripheral device;
- a second register to store said public encryption key; and
- a processing circuit to generate, using said first seed key and said public encryption key, a second seed key different from said first seed key, said second seed key to encrypt communications between said software component and said <a href="https://hardwarevideo">hardwarevideo</a> controller.
- 15. (Currently Amended) The <u>hardwarevideo</u> controller as in Claim 14, wherein said information handling system generates said first key and wherein generation of said first key includes:

using said public encryption key to select a plurality of private encryption keys; and combining said selected private encryption keys.

- 16. (Currently Amended) The hardwarevideo controller as in Claim 14, wherein communications between said hardwarevideo controller and said information handling system are performed over a system bus.
- 17. (Currently Amended) The <u>hardwarevideo</u> controller as in Claim 16, wherein said system bus is a Peripheral Component Interconnect bus.
- 18. (Currently Amended) The <u>hardware video</u> controller as in Claim 14, wherein said digital communications connector is a Digital Video Interface connector.
- 19. (Currently Amended) The <u>hardwarevideo</u> controller as in Claim 14, wherein said <u>hardwarevideo</u> controller is a video controller.

20. (Currently Amended) The hardware video controller as in Claim 14, wherein said peripheral device is a display device.

## 21.-23. (Canceled)

- 24. (Currently Amended) A system comprising:
- a processor coupled to a system bus;

memory coupled to said system bus for use by said processor;

- a collection of instructions to be stored in said memory and executed by said processor, said collection of instructions including instructions to establish an encrypted link between said system and a peripheral device, wherein establishing said encrypted link includes generating a first seed key common to both said peripheral device and said system, said collection of instructions further including instructions to deliver said first seed key to a peripheral video controller; and
- a peripheral video controller including:
  - a bus connection to receive said first seed key;
  - a digital communications link to connect to said peripheral device and to receive a public encryption key from said peripheral device;
  - a first set of registers to store said first seed key;
  - a second register to store said public encryption key; and
  - a processing circuit to generate, using said first seed key and said public encryption key, a second seed key different from said first seed key, said second seed key to encrypt communications between said system and said peripheralvideo controller.
- 25. (Original) The system as in Claim 24, wherein said memory includes random access memory and read-only memory.
  - 26. (Original) The system as in Claim 24, wherein generating a first seed includes: using said public encryption key to select a plurality of private encryption keys; and combining said selected private encryption keys.

- 27. (Original) The system as in Claim 26, wherein said public encryption key and said plurality of private encryption keys are located in said memory.
- 28. (Original) The system as in Claim 24, wherein said system bus is a Peripheral Component Interconnect bus.
- 29. (Original) The system as in Claim 24, wherein said digital communications link is a Digital Video Interface connector.
  - 30. (Canceled)
- 31. (Original) The system as in Claim 24, wherein said peripheral device is a display device.
- 32. (Original) The system as in Claim 24, wherein encryption is performed using an orthogonal transformation.
  - 33. 34. (Canceled)
- 35. (Original) The system as in Claim 24, wherein the digital communications link is to receive a public encryption key from said peripheral device and to transmit encrypted digital data to said peripheral device.